FIG. 1

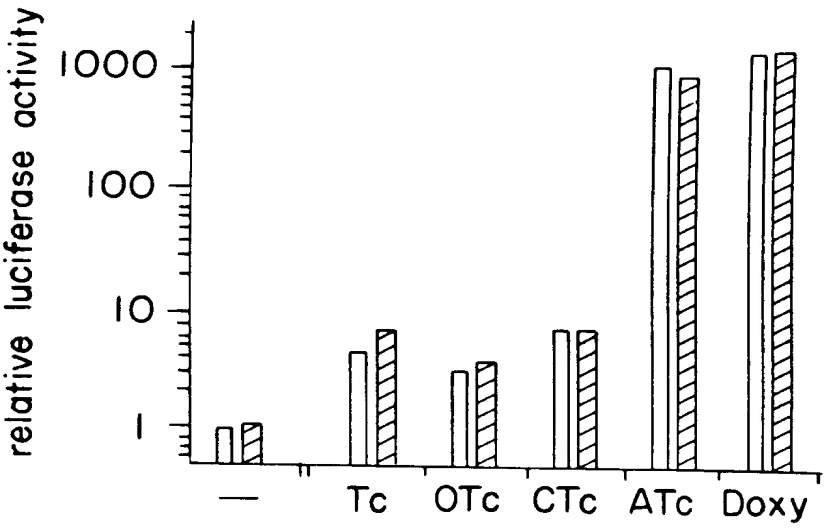
relative luciferase activity
1000
100
10
1
—
Tc
OTc
CTc
ATc
Doxy

FIG. 2

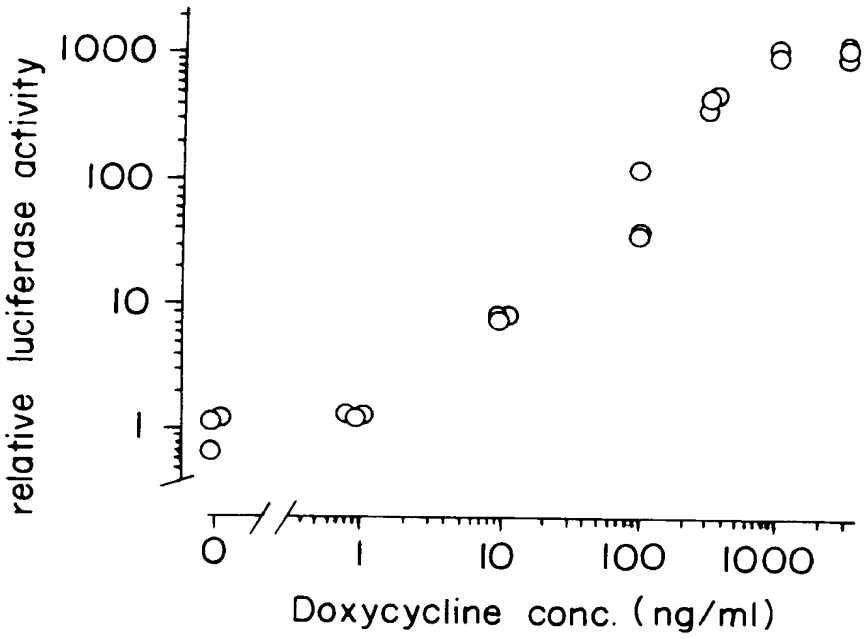
relative luciferase activity
1000
100
10
1
0
1
10
100
1000
Doxycycline conc. (ng/ml)

FIG. 3

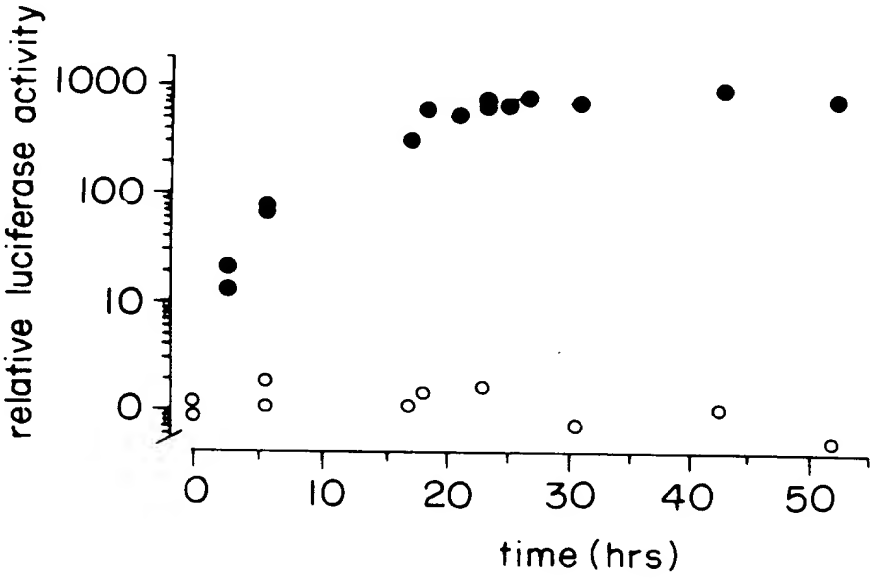
relative luciferase activity
1000
100
10
0
0
10
20
30
40
50
time (hrs)

FIG. 4

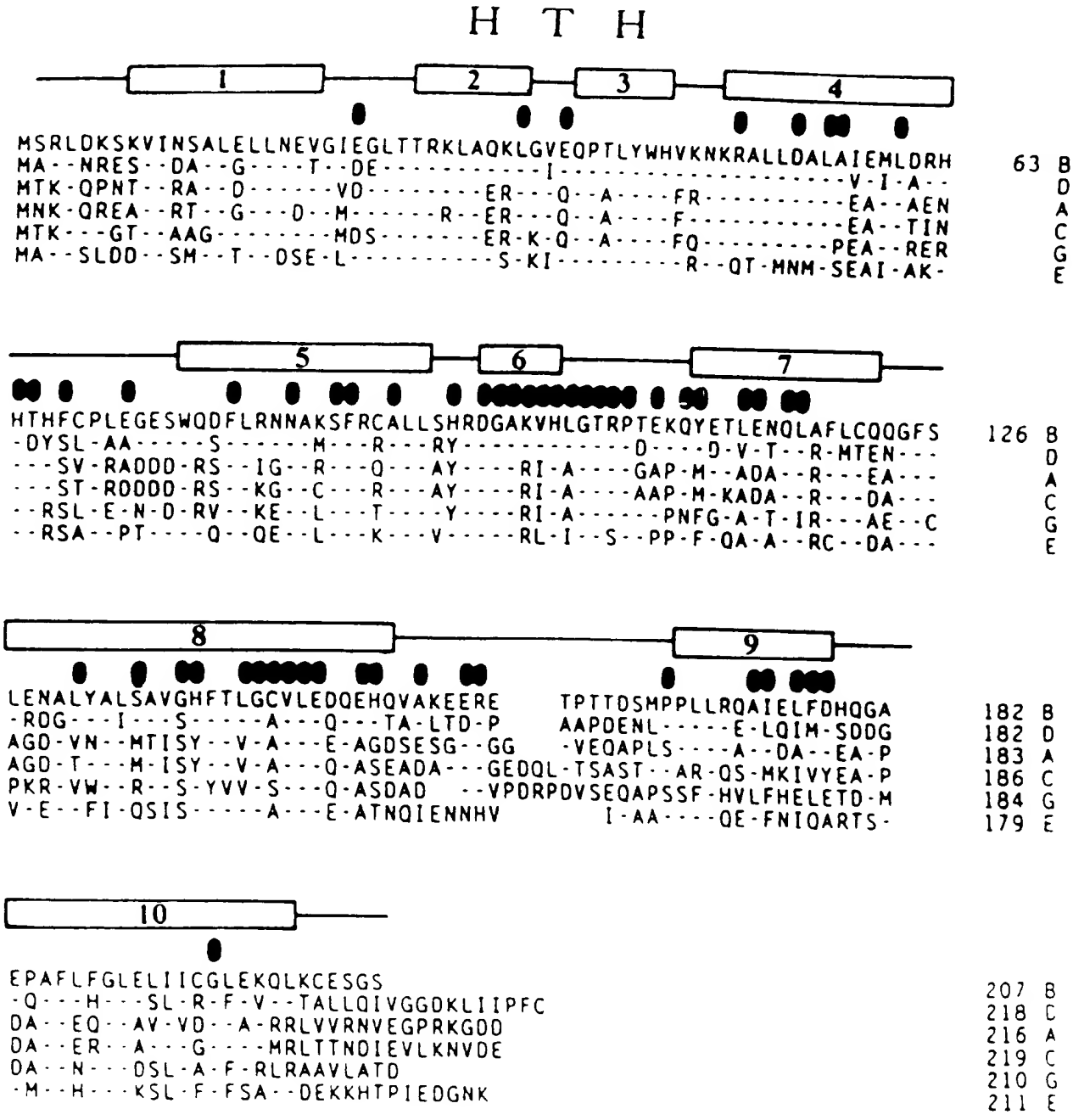
H T H
1
2
3
4
MSRLDKSKVINSALELLNEVGIEGLTTRKLAQKLGVEQPTLYWHVKNKRALLDALAIEMLDRH
MA--NRES--DA--G----T--DE----------I--------------------V-I-A--
MTK-QPNT--RA--D------VD--------ER---Q--A----FR----------EA--AEN
MNK-QREA--RT--G---D--M------R--ER---Q--A----F----------EA--TIN
MTK---GT--AAG--------MDS-------ER-K-Q--A----FQ---------PEA--RER
MA--SLDD--SM--T--DSE-L----------S-KI---------R--QT-MNM-SEAI-AK-
63 B
D
A
C
G
E
5
6
7
HTHFCPLEGESWQDFLRNNAKSFRCALLSHRDGAKVHLGTRPTEKQYETLENQLAFLCQQGFS
-DYSL-AA-----S------M---R---RY----------D----D-V-T--R-MTEN---
---SV-RADDD-RS--IG--R---Q---AY----RI-A----GAP-M--ADA--R---EA---
---ST-RDDDD-RS--KG--C---R---AY----RI-A----AAP-M-KADA--R---DA---
--RSL-E-N-D-RV--KE--L---T----Y----RI-A------PNFG-A-T-IR---AE--C
--RSA--PT----Q--QE--L---K---V-----RL-I--S--PP-F-QA-A--RC--DA---
126 B
D
A
C
G
E
8
9
LENALYALSAVGHFTLGCVLEDQEHQVAKEERE
-RDG---I---S-----A---Q---TA-LTD-P
AGD-VN--MTISY--V-A---E-AGDSESG--GG
AGD-T---M-ISY--V-A---Q-ASEADA---GEDQL
PKR-VW--R--S-YVV-S---Q-ASDAD
V-E--FI-QSIS-----A---E-ATNQIENNHV
TPTTDSMPPLLRQAIELFDHQGA
AAPDENL-----E-LQIM-SDDG
-VEQAPLS----A--DA--EA-P
-TSAST--AR-QS-MKIVYEA-P
--VPDRPDVSEQAPSSF-HVLFHELETD-M
I-AA----QE-FNIQARTS-
182 B
182 D
183 A
186 C
184 G
179 E
10
EPAFLFGLELIICGLEKQLKCESGS
-Q---H---SL-R-F-V--TALLQIVGGDKLIIPFC
DA--EQ--AV-VD--A-RRLVVRNVEGPRKGDD
DA--ER--A---G----MRLTTNDIEVLKNVDE
DA--N---DSL-A-F-RLRAAVLATD
-M--H---KSL-F-FSA--DEKKHTPIEDGNK
207 B
218 D
216 A
219 C
210 G
211 E

FIG.5

FIG.6

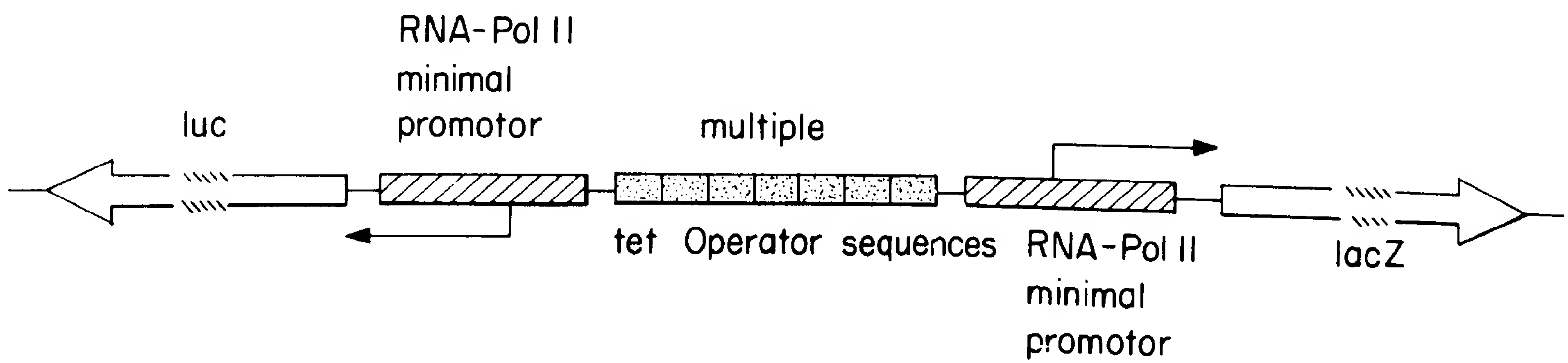
luc
RNA-Pol II
minimal
promotor
multiple
tet Operator sequences
RNA-Pol II
minimal
promotor
lacZ

FIG. 7A

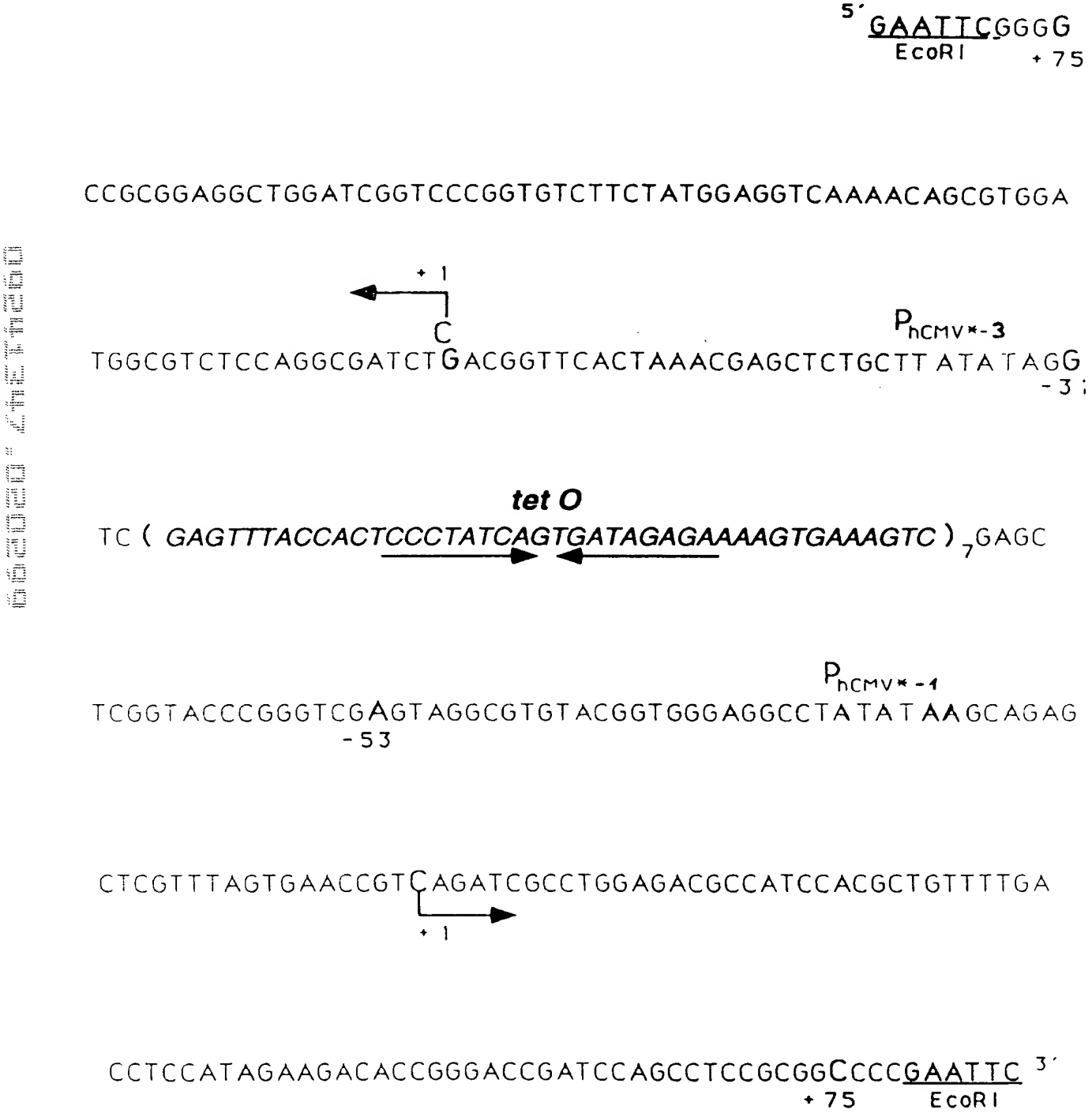
5' GAATTCGGGG
EcoRI
+75
CCGCGGAGGCTGGATCGGTCCCGGTGTCTTCTATGGAGGTCAAAACAGCGTGGA
+1
C
PhCMV*-3
TGGCGTCTCCAGGCGATCTGACGGTTCACTAAACGAGCTCTGCTTATATAGG
-3
tet O
TC (GAGTTTACCACTCCCTATCAGTGATAGAGAAAAGTGAAAGTC)7GAGC
PhCMV*-1
TCGGTACCCGGGTCGAGTAGGCGTGTACGGTGGGAGGCCTATATAAGCAGAG
-53
CTCGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGA
+1
CCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGGCCCCGAATTC 3'
+75
EcoRI

FIG. 7B

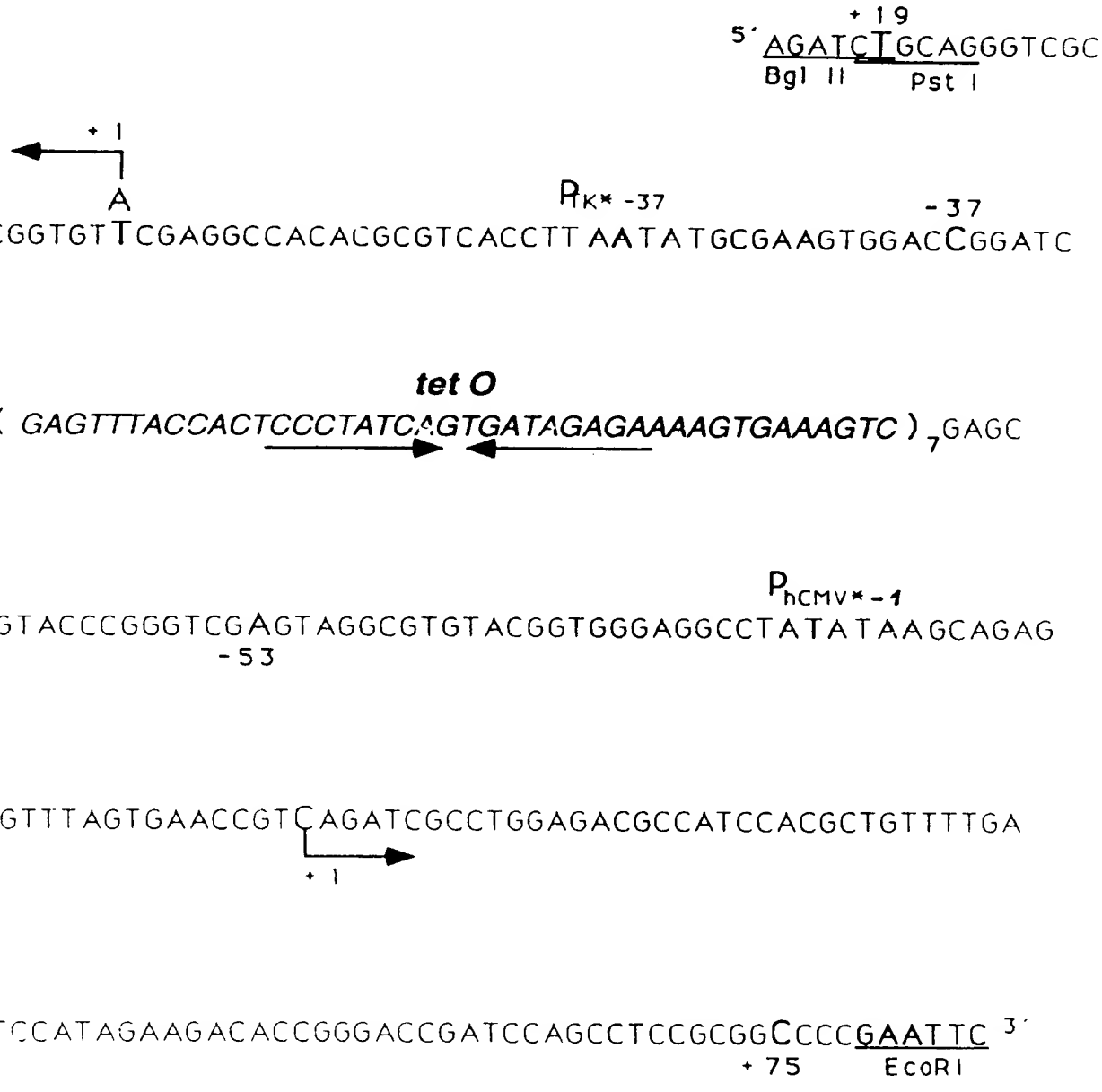
+19
5' AGATCTGCAGGGTCGC
Bgl II
Pst I
+1
A
PtK* -37
-37
TCGGTGTTCGAGGCCACACGCGTCACCTTAATATGCGAAGTGGACCGGATC
tet O
TC (GAGTTTACCACTCCCTATCAGTGATAGAGAAAAGTGAAAGTC)7 GAGC
PhCMV* -1
TCGGTACCCGGGTCGAGTAGGCGTGTACGGTGGGAGGCCTATATAAGCAGAG
-53
CTCGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGA
+1
CCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGGCCCCGAATTC 3'
+75
EcoRI

FIG. 8A

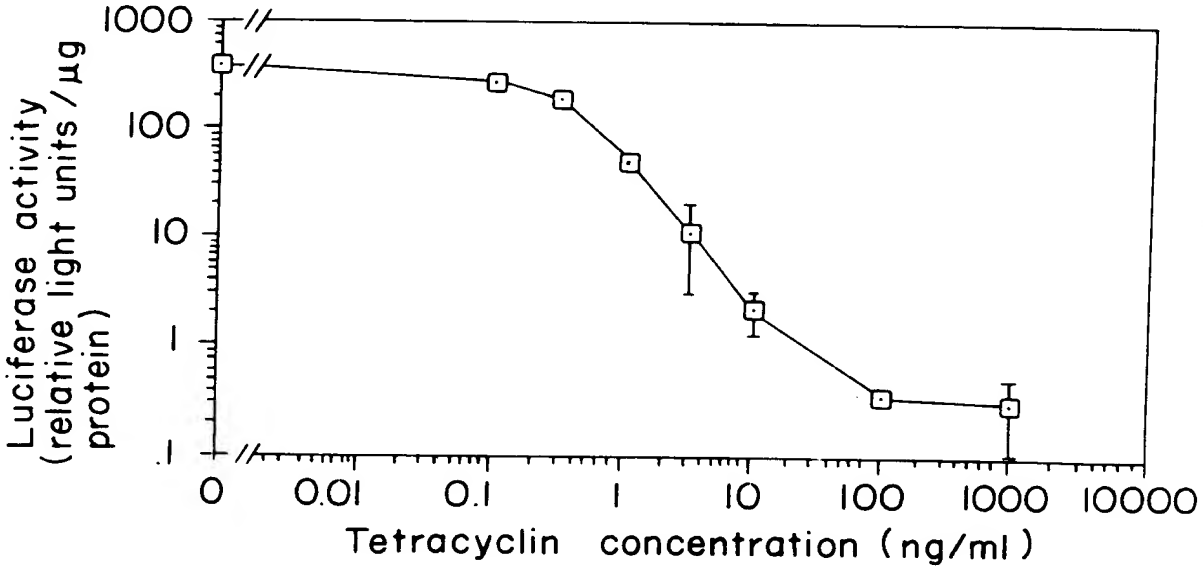
Luciferase activity
(relative light units / µg protein)
1000
100
10
1
.1
0
0.01
0.1
1
10
100
1000
10000
Tetracyclin concentration (ng/ml)

FIG. 8B

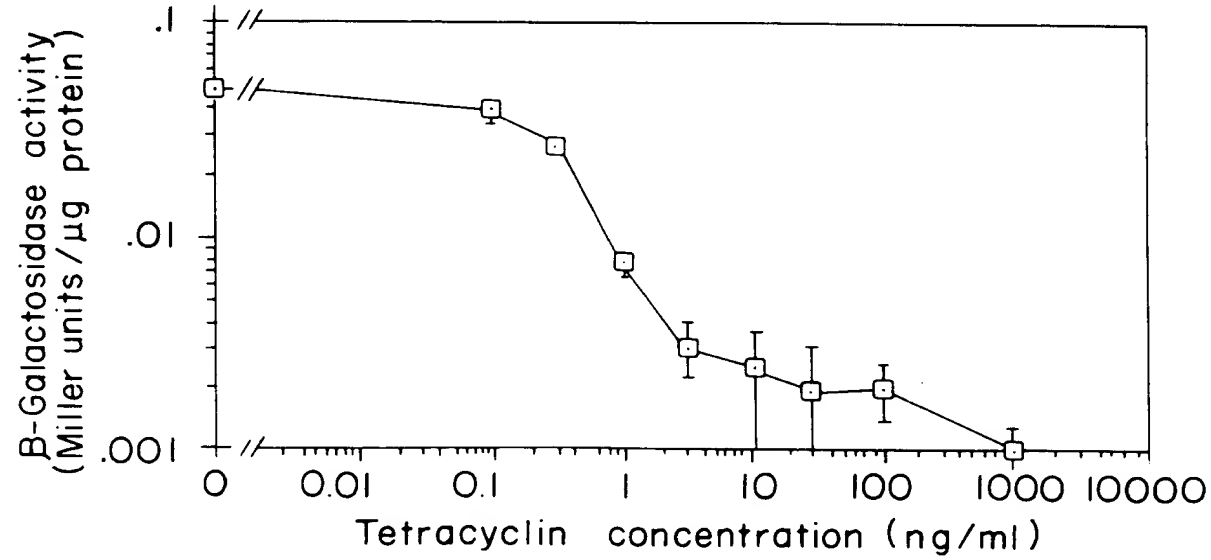
β-Galactosidase activity
(Miller units / µg protein)
.1
.01
.001
0
0.01
0.1
1
10
100
1000
10000
Tetracyclin concentration (ng/ml)

FIG. 9A

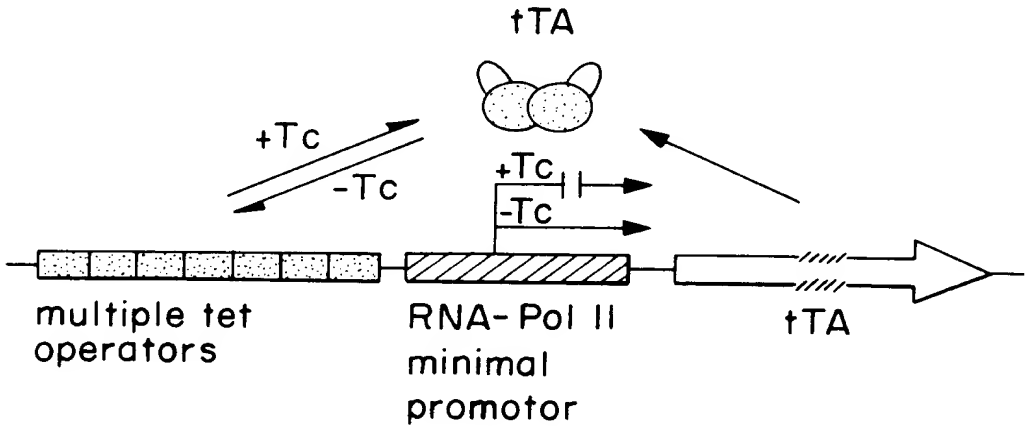
tTA
+Tc
-Tc
+Tc
-Tc
multiple tet operators
RNA-Pol II minimal promotor
tTA

FIG. 9B

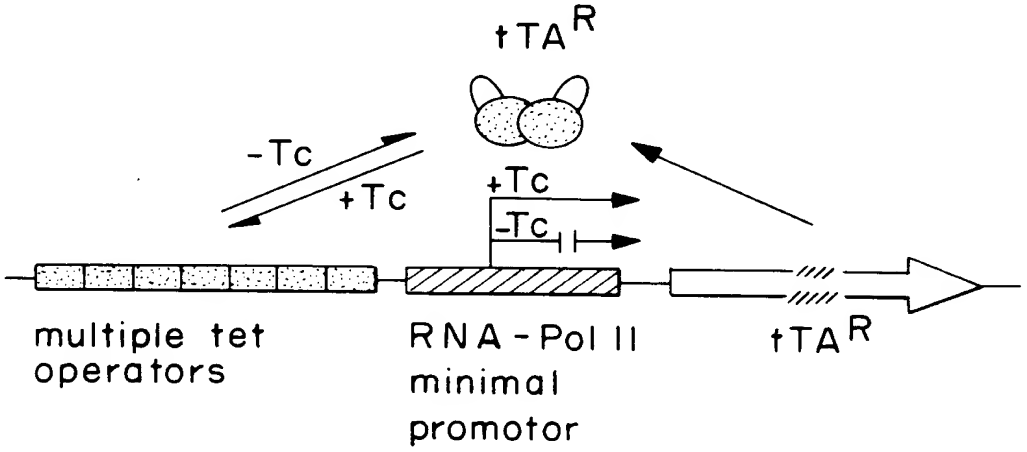
tTA^R
-Tc
+Tc
+Tc
-Tc
multiple tet operators
RNA-Pol II minimal promotor
tTA^R

FIG. 10

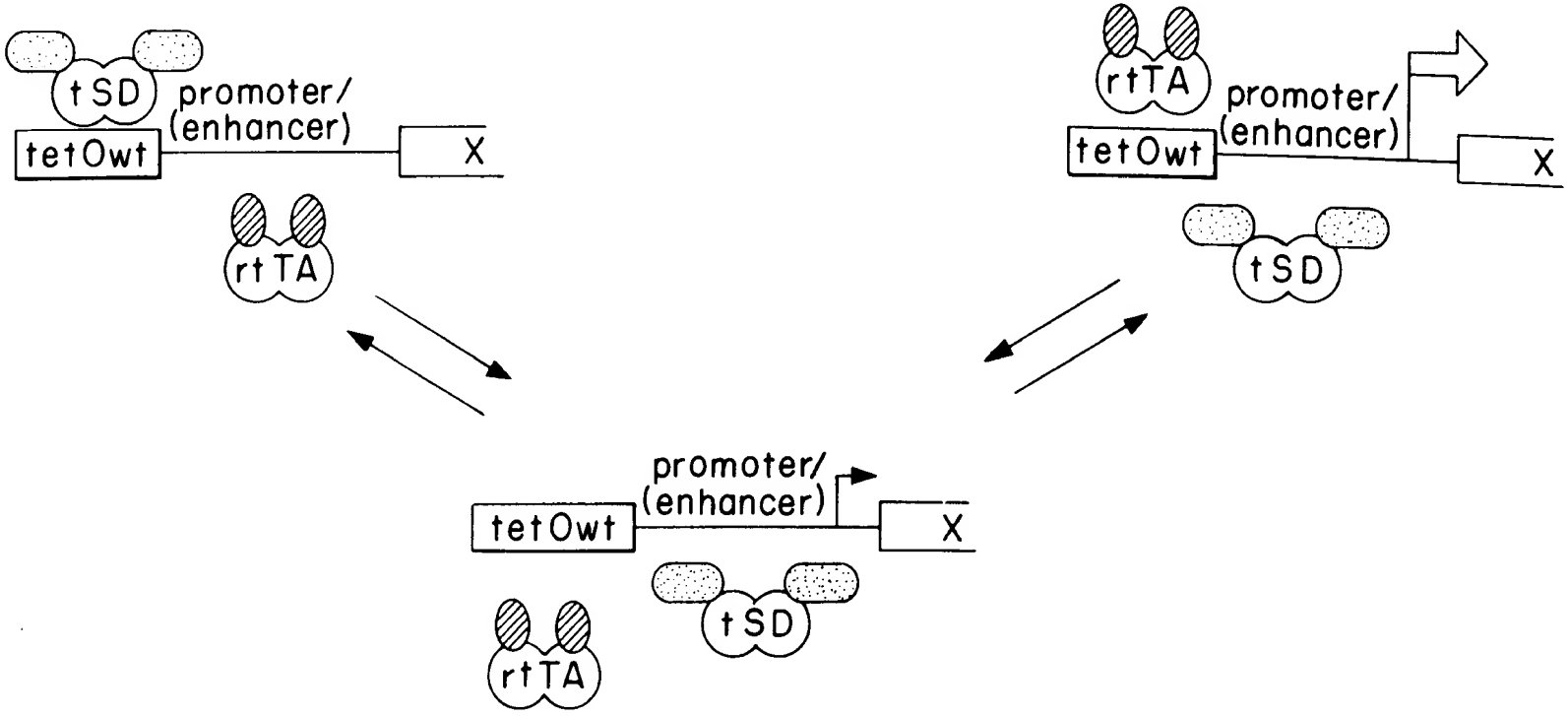
tSD
promoter/
(enhancer)
tetOwt
X
rtTA
rtTA
promoter/
(enhancer)
tetOwt
X
tSD
promoter/
(enhancer)
tetOwt
X
tSD
rtTA
0
1000
concentration of doxycycline (ng/ml)

FIG. 11

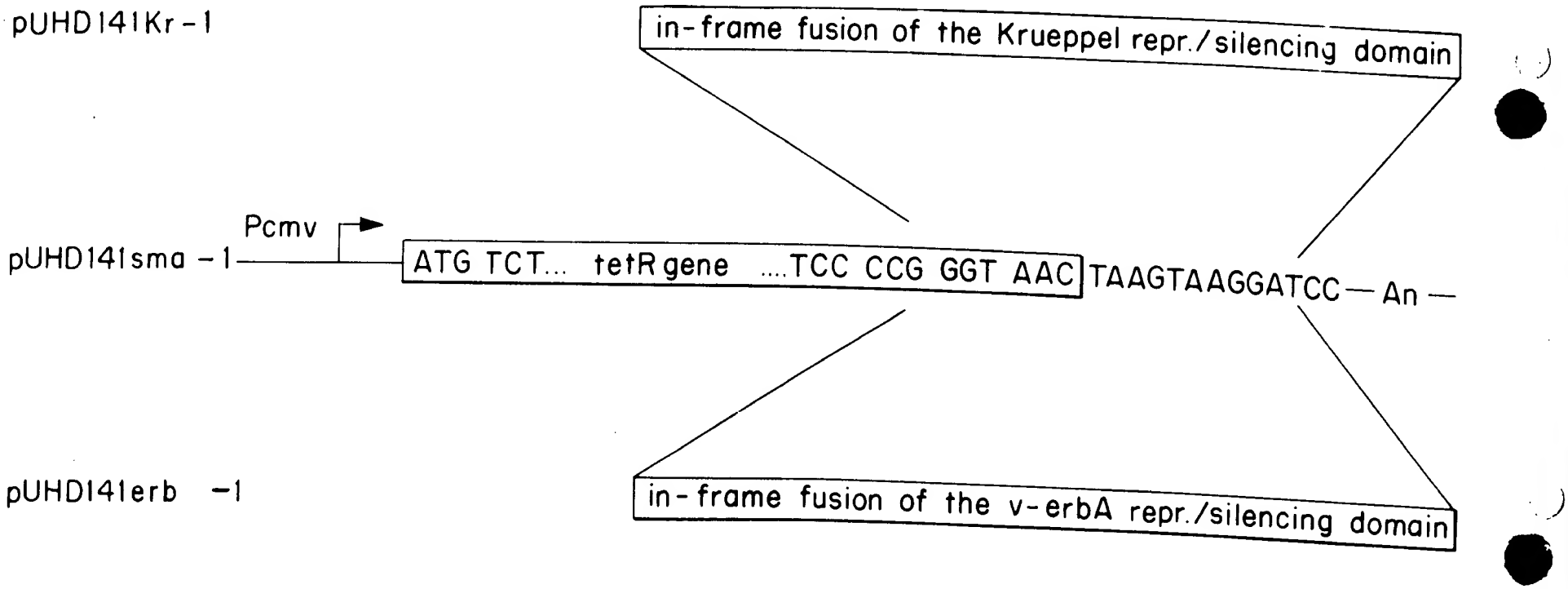
pUHD141Kr-1
in-frame fusion of the Krueppel repr./silencing domain
Pcmv
pUHD141sma-1
ATG TCT... tetR gene ....TCC CCG GGT AAC
TAAGTAAGGATCC — An —
pUHD141erb -1
in-frame fusion of the v-erbA repr./silencing domain

FIG. 12

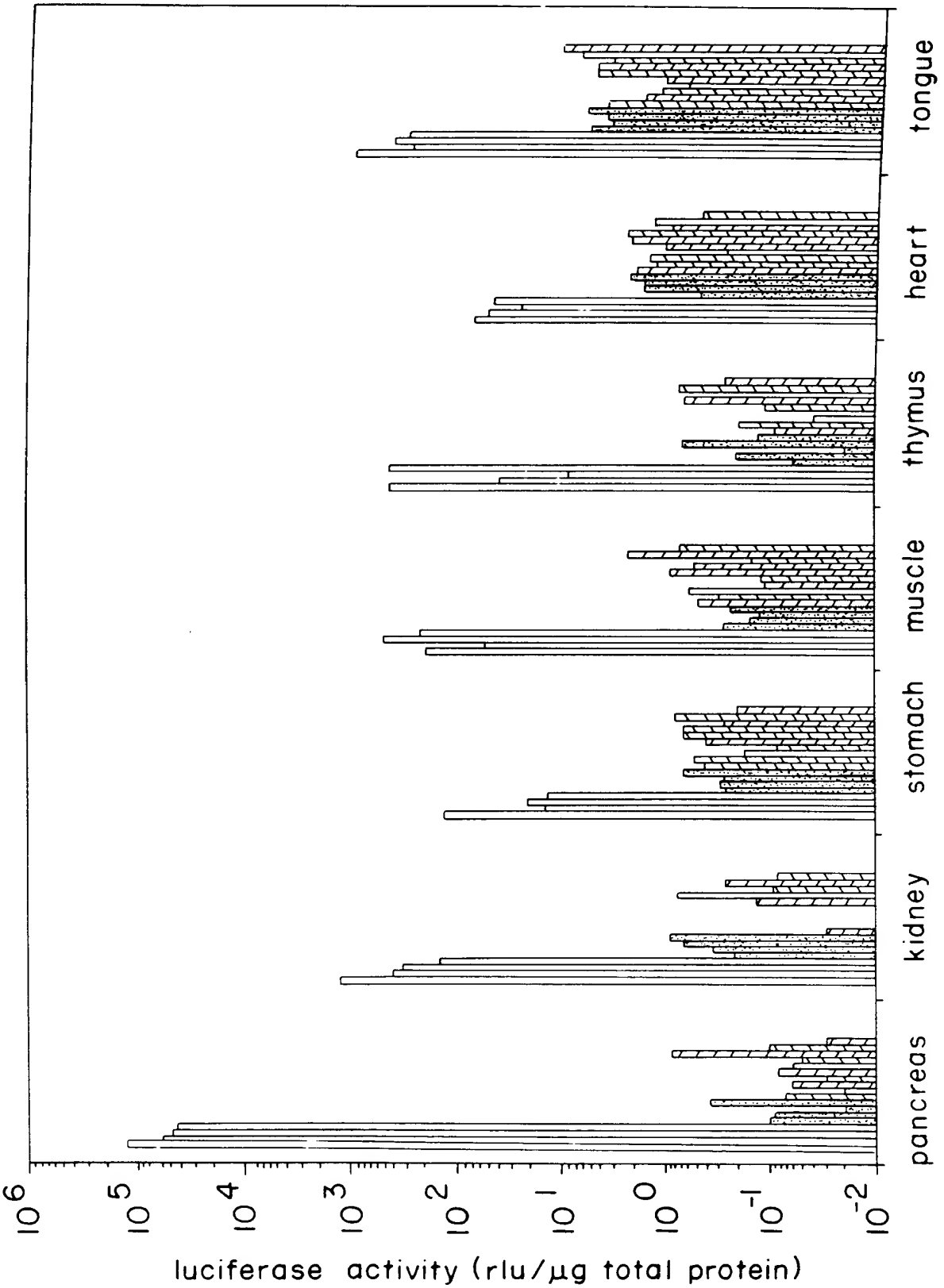
pancreas
kidney
stomach
muscle
thymus
heart
tongue
10^{6}
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
luciferase activity (rlu/μg total protein)

FIG. 13

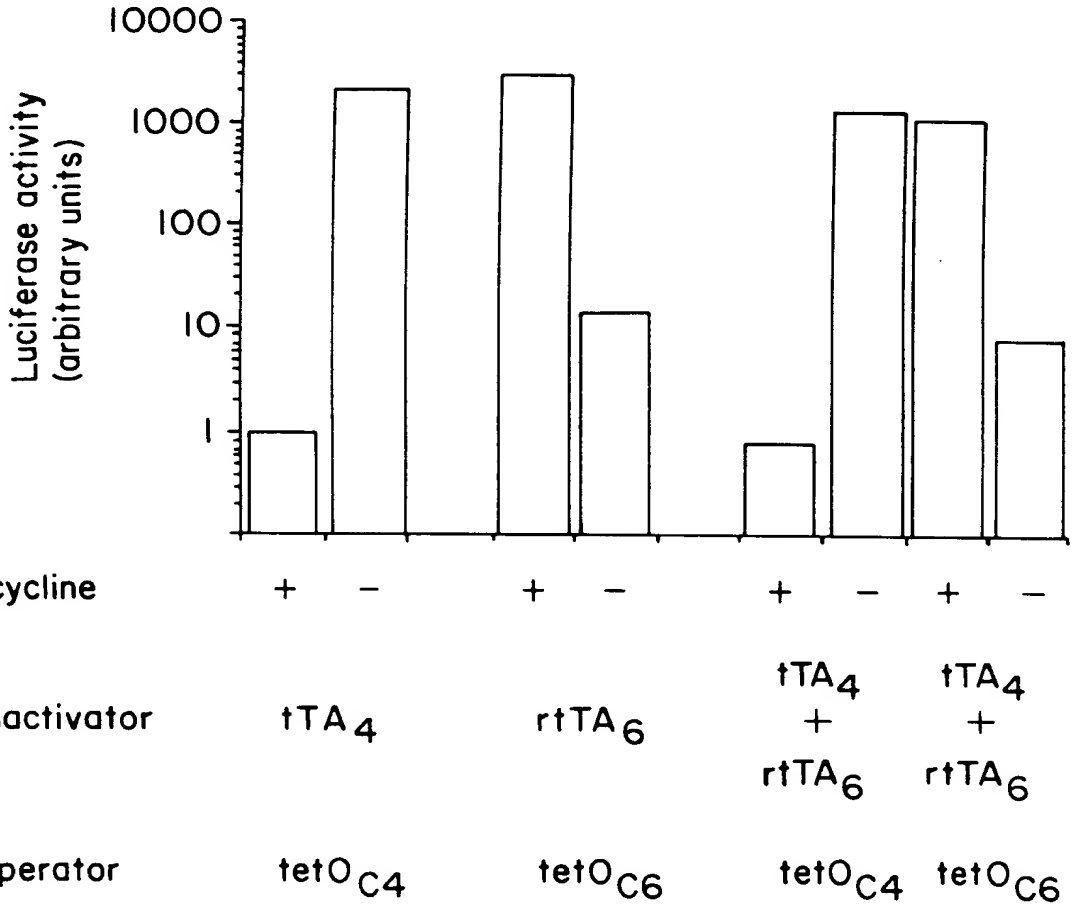
Luciferase activity
(arbitrary units)
10000
1000
100
10
1
Doxycycline
+ − + − + − + −
Transactivator
tTA4
rtTA6
tTA4 + rtTA6
tTA4 + rtTA6
tet Operator
tetOC4
tetOC6
tetOC4
tetOC6

FIG. 14A

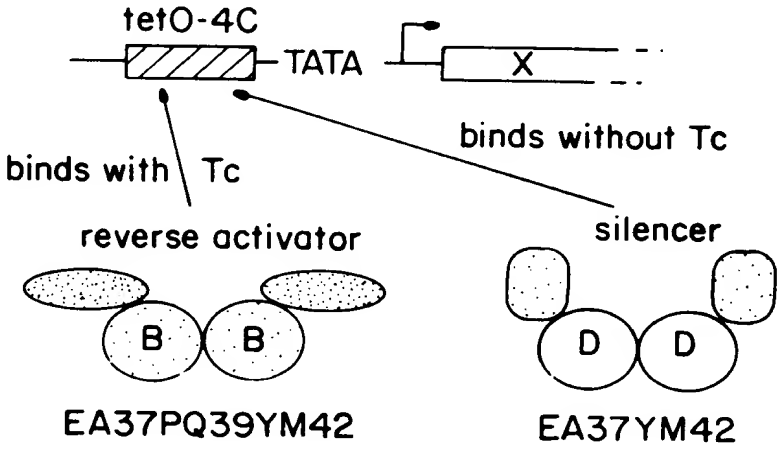

FIG. 14B